

CLAIMS

What is claimed is:

1. A computer program product for fulfilling service requests in a system of computers that communicate as nodes within a network, the computer program product comprising a computer usable medium having computer readable code thereon, including program code which:
 - 5 in response to an initial service request that requests a service provided by a primary server node, sends a mobile agent from the primary server node to an intermediate node, the mobile agent indicating to the intermediate node that a secondary server node is capable of providing the service;
 - 10 intercepts, at the intermediate node, a subsequent service request sent from a client node to the primary server node, the subsequent service request requesting the service, and sends an instruction from the intermediate node to the secondary server node, the instruction instructing the secondary server node to provide the service; and
 - 15 in response to the instruction, provides the service from the secondary server node to the client node.
2. The computer program product of claim 1 wherein the program code:
 - 20 in response to the initial service request, provides the service from the primary server node, through the intermediate node, to a client node that sent the initial service request, the service and the mobile agent being sent from the primary server node to the intermediate node as a service response.

3. The computer program product of claim 1 wherein the mobile agent includes a set of rules for responding to service requests requesting the service and a list of server nodes, and wherein the program code intercepts by:
selecting the secondary server node from the list of server nodes
5 according to the set of rules, each of the server nodes on the list being capable of providing the service.
4. The computer program product of claim 1 wherein the program code:
receives, at the client node, a service response including the service from
the secondary server node and a source identifier indicating the primary server
10 node as a source of the service response.
5. The computer program product of claim 1 wherein the initial service request is sent from a first client and the subsequent client request is sent from a second client in the network.
6. A computer program product for responding to service requests, the computer
15 program product comprising a computer usable medium having computer readable code thereon, including program code which:
receives, at a primary server node, an initial service request sent from a client node through an intermediate node, the service request identifying a service provided by the primary server node; and
20 sends a service response from the primary server node to the client node through the intermediate node, the service response including (i) the service to be forwarded by the intermediate node to the client node and (ii) a mobile agent that includes a set of rules directing the intermediate node to instruct a secondary server node to provide the service in response to a subsequent service request.

7. The computer program product of claim 6 wherein the mobile agent further includes a list of server nodes and authorization tokens, and wherein the program code:
queries the server nodes on the list according to the authorization tokens.
- 5 8. A computer program product for providing a service in response to service requests, the computer program product comprising a computer usable medium having computer readable code thereon, including program code which:
receives, at an intermediate node, an initial service request sent from a client node to a primary server node that provides the service, and forwards the
10 initial service request to the primary server node;
receives, at the intermediate node, a service response from the primary server node that includes the service and a mobile agent, and forwards the service to the client node, the mobile agent including a list of server nodes and a set of rules directing the intermediate node to instruct a particular server node on
15 the list to provide the service in response to subsequent service requests, the particular server node being different than the primary server node; and
receives, at the intermediate node, a subsequent service request that requests the service provided by the primary server node, and sends an instruction to the particular server node instructing the particular server node to
20 provide the service in response to the subsequent service request.
9. The computer program product of claim 8 wherein the program code:
queries the particular server node periodically to obtain server node data from the particular server node; and
applies the set of rules on the server node data to determine future
25 operations.

10. A computer program product for fulfilling service requests in a system of computers that communicate as nodes within a network, the computer program product comprising a computer usable medium having computer readable code thereon, including program code which:
- 5 receives, at a secondary server node, a mobile agent from a primary server node; and
- in response to multiple service requests from multiple client nodes, executes code of the mobile agent at the secondary server node to provide multiple service responses to the multiple client nodes, the multiple service
- 10 responses including a first service response having a first content for a first client node and a second service response having a second content for a second client node, the first and second contents being different from each other.
11. The method of claim 10 wherein the code of the mobile agent is a computerized game, and wherein the program code executes the code of the mobile agent by:
- 15 providing, to the first client node, a first image as the first content of the first service response; and
- providing, to the second client node, a second image as the second content of the second service response, the first and second images being different views of a computer simulated environment.
- 20 12. The method of claim 10 wherein the program code executes the code of the mobile agent by:
- providing, to the first client node, a first advertisement as the first content of the first service response based on client node data; and
- 25 providing, to the second client node, a second advertisement as the second content of the second service response based on the client node data, the first and second advertisements being different from each other.

13. A computer program product for fulfilling service requests in a system of computers that communicate as nodes within a network, the computer program product comprising a computer usable medium having computer readable code thereon, including program code which:
- 5 in response to an initial service request that requests a service provided by a primary server node, sends a mobile agent from the primary server node to an intermediate node, the mobile agent instructing the intermediate node to operate as a front end server;
- 10 intercepts, at the intermediate node, a subsequent service request sent from a client node to the primary server node, the subsequent service request requesting the service, and executing instructions to provide at least a portion of the service.